PEO AMMUNITION

Munitions Executive Summit

February 2012

PM Acquisition Panel

Presented by:

Mr. Shields

DPEO Ammunition

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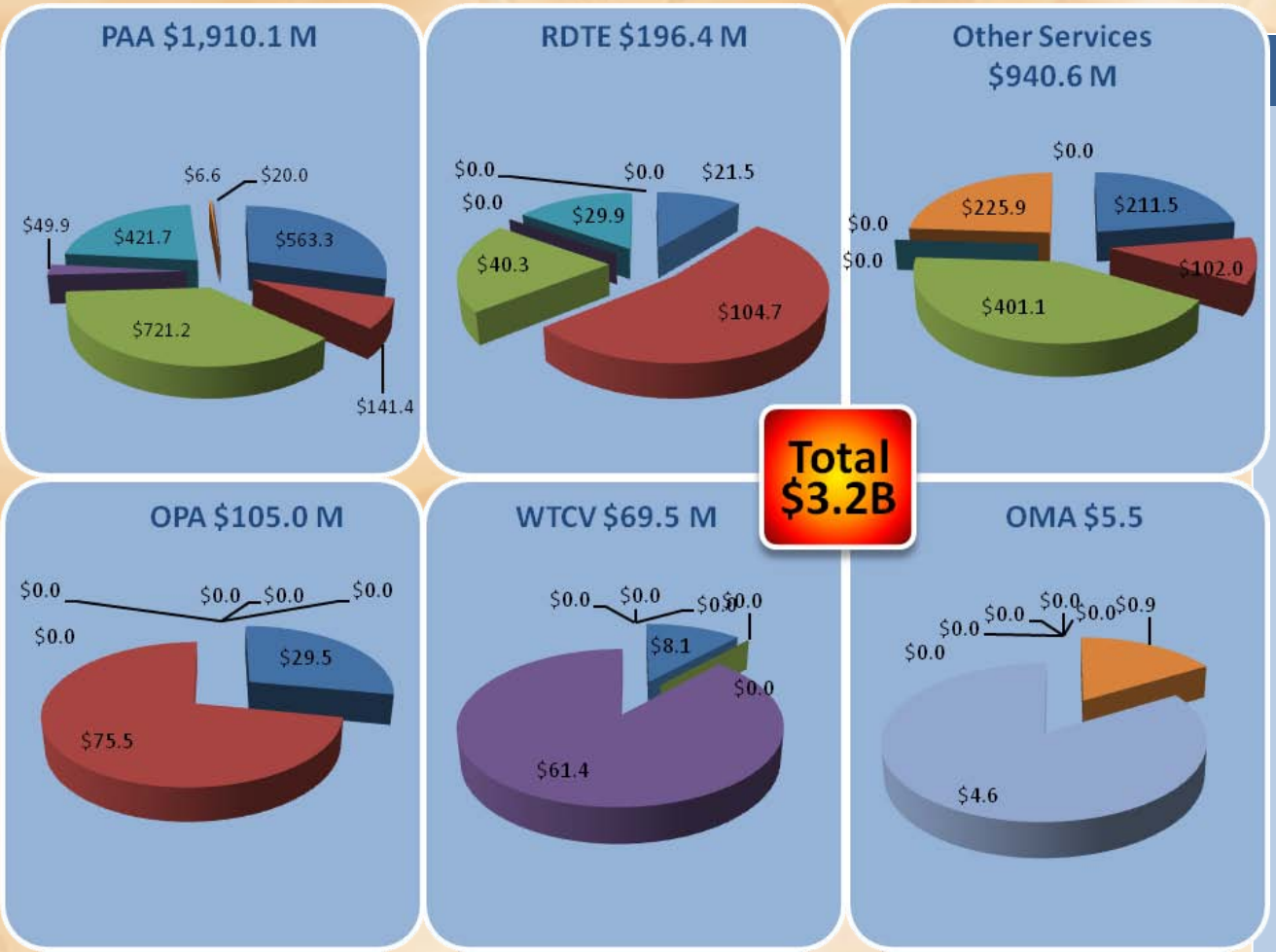
FY 13 PEO Ammo Funding



PEO Ammo | PM Close Combat Systems | PM Combat Ammunition Systems | PM Joint Services

PM Maneuver Ammunition Systems | PD Towed Artillery Systems | PD Joint Products

Portfolio Summary

Programs:

ACAT I	1
ACAT II	4
ACAT III	645+
QRCs	22

Product Phases*:

Pre-System Acquisition	22
Eng & Mfg Dev	2
Prod & Dep	272
Operations & Support	376+

*Some programs in multiple phases

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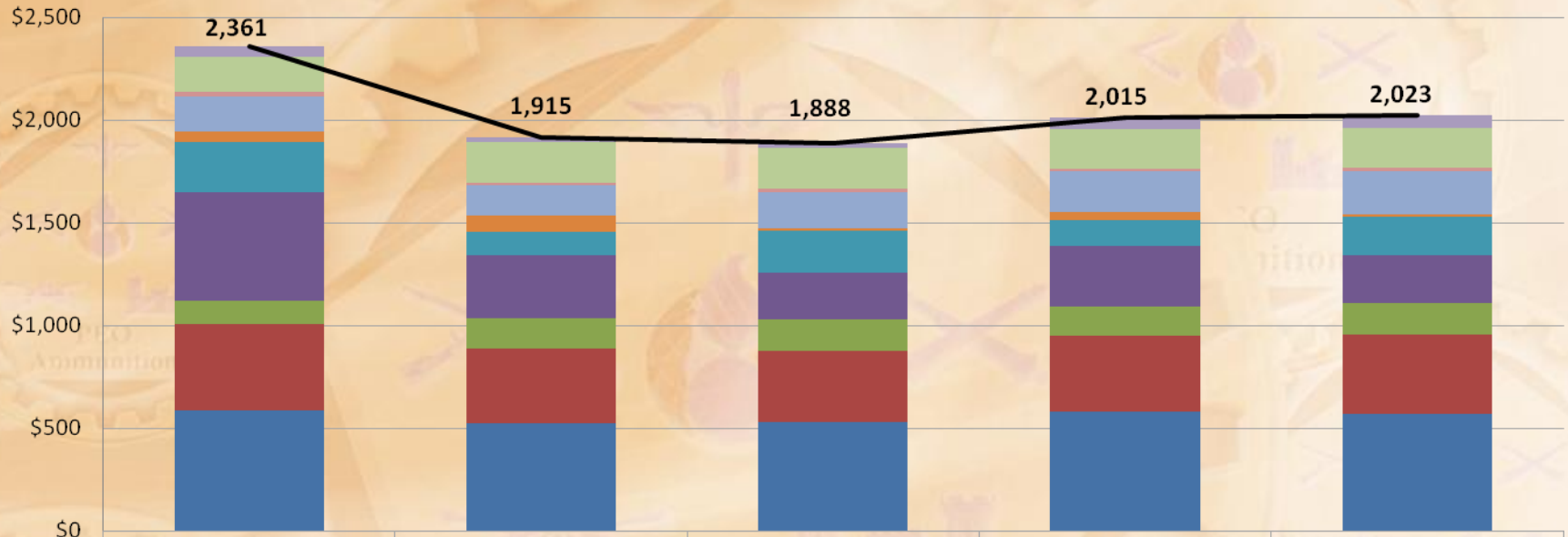
FY13 PresBud FYDP
by Ammunition Families (in $M)



	FY13	FY14	FY15	FY16	FY17
Navy Guns	51	25	25	60	59
Bombs	174	194	199	191	196
Misc Items	23	14	13	16	18
Other AMMO	169	149	180	195	211
Mines	48	76	10	40	11
Mortar AMMO	249	117	206	125	184
Artillery AMMO	525	309	226	296	237
Tank Family	112	145	154	140	151
Medium Cal	422	363	346	374	386
Small Cal	585	524	528	577	569
Total	2,361	1,915	1,888	2,015	2,023

*Data Source: B&P System PBD13 cycle, funding requirements for all SMCA services. *This data excludes FMS, Production Base and Demil.
*FY13 includes OCO in the amount of $450M.

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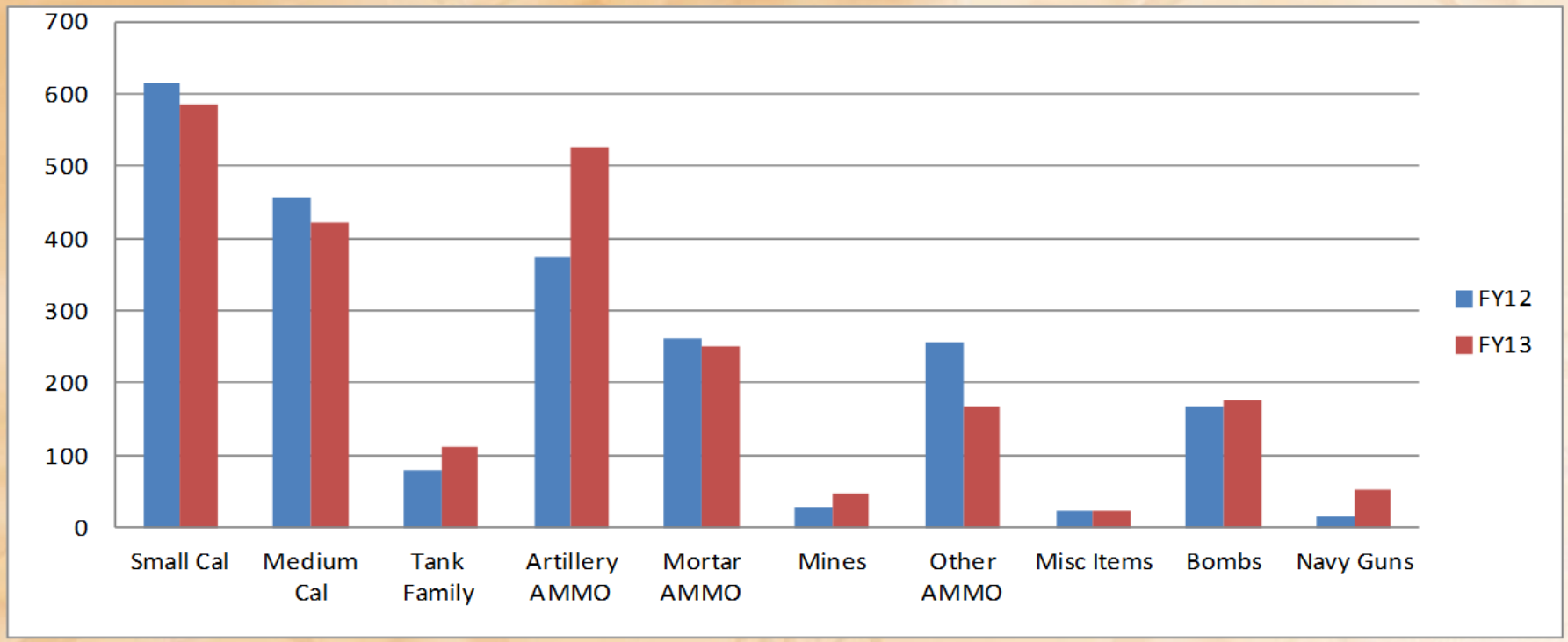
Comparison of FY12 vs. FY13 by Ammunition Families FY13 PresBud (in $M)



	Small Cal	Medium Cal	Tank Family	Artillery AMMO	Mortar AMMO	Mines	Other AMMO	Misc Items	Bombs	Navy Guns	Total
FY12 (M)	614	456	79	373	262	29	255	23	169	15	**2,275**
FY13 (M)	585	422	112	525	249	48	169	23	174	51	**2,361**
$ (M) Change	**(28)**	**(34)**	**34**	**153**	**(13)**	**19**	**(86)**	**(0)**	**6**	**36**	**86**
% Change	**(4.62%)**	**(7.40%)**	**43.00%**	**41.02%**	**(4.85%)**	**63.57%**	**(33.82%)**	**(1.39%)**	**3.36%**	**243.64%**	**3.8%**

*Data Source: B&P System PBD13 cycle, funding requirements for all SMCA services. *This data excludes FMS, Production Base and Demil.
*FY12 includes OCO in the amount of $386M. *FY13 includes OCO in the amount of $450M.

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PEO Ammo Portfolio Reviews

- First Session: PM / PD, TRADOC, contracting centers, ARDEC, JMC, and other Services
  - Prioritizes efforts and results in identification of opportunities to modify or terminate requirements where capability redundancy exists, and/or reduce/stop production and/or delay development
- Second Session: Includes HQDA representatives from G3, G4 and G8
  - Recommendations from HQDA and feeds the Ammunition Management Processes
  - Controls redundancy and supports the POM build
- Third Session: GO/Executive level review
  - Assess/Agree: capability roadmaps and Warfighter modernization S&T efforts
  - Assess/Agree: should-cost, requirements, capability redundancy, opportunities to reduce production quantities

Ensures a common understanding and full visibility of requirements driving fiscal investment across R&D, procurement, and sustainment

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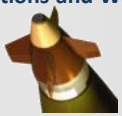
PEO Modernization Strategy

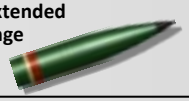
Emerging Technologies Programs (next 5 Years)

Artillery Munitions and Weapon Systems

Precision Guidance Kit



M795 Extended Range



Laser Ignition Systems

DPICM Alternative

Mortar Munitions and Weapon Systems

MAPAM

Lightweight Mortar Systems 60mm/81mm

Accelerated Precision Mortar Initiative

Direct Fire

120MM, Advanced Kinetic Energy

Small & Medium Caliber

Lightweight Ammo

7.62 EPR

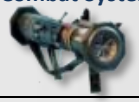
40mm Non Dud Prod.

Non-Lethal

Individual Non-Lethal System (INS)

Dual Mode (Lethal/N-L) Grenade

Close Combat Systems



Individual Assault Munition (IAM)

Spider Improvements

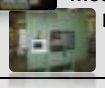
IED Defeat & Counter Mine

Counterbomber PBIED Detection System

Passive Infra-red IED Pre-Detonation System

Industrial Base

New NC Facility Radford AAP



Sm. Cal. Modernization Lake City AAP

A2B move Holston AAP

TATB Production Holston AAP

Demilitarization

Disassembly and Energetic Destruction Technologies

Future Trends (5+ years)

Affordable, GPS Denied Precision

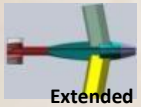
Advanced Lightweight Position Navigation

Non-Toxic, Non-Incendiary Smoke

Extended Range Guided Projectiles

Affordable, GPS Denied Precision

Non-Toxic, Non-Incendiary Smoke



Extended Range Guided Projectiles

Embedded Propellant Temperature Sensor

30mm Airbust

Advanced Armor Defeat

40mm Airburst

Imperceptible Trace

Passive and Covert Target Marking

Next Gen Networked Munitions

Non-Toxic, Non-Incendiary Multi-Spectral Smoke

Standoff Entry Breaching and Asset Neutralization

Standoff Explosive Neutralization

Standoff Substance Identification

Solventless Propellant Line Radford AAP

Flexible Manufacturing Facility

Enhanced Autoclave Equipment and Process for Demilitarizing IM Explosives

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PEO Ammo Technology Focus Areas

- Lightweight Small Cal Ammo
- Imperceptible Small Cal Tracer
- Advanced Small Cal Armor Piercing
- Non-Lethal Force Application
- Low cost/small package Wireless Initiation Devices
- Next Generation Mounted/Dismounted Breeching Devices

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PEO Ammo Technology Focus Areas (cont)

- Extended Range Artillery & Mortars
- Anti-Jam, GPS Denied & Alternate (non-GPS), and M-Code GPS Affordable Precision
- Electronic Countermeasures to disrupt enemy electronics
- Non-Toxic, Non-Incendiary Smoke
- Increased HE Capability and Cannon Cluster Munition replacement technologies

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Contracting Opportunities

- DoD Ordnance Technology Consortium (DOTC)
  - Focal point for ordnance system technology research and development http://www.nwec-dotc.org/
- National Small Arms Technology Consortium (NSATC)
  - Research, development and engineering of small arms weapons systems and munitions http://nationalsmallarmscenter.com/
- DoD Small Business Innovation Research (SBIR)
  - http://www.acq.osd.mil/osbp/sbir/index.shtml
- RFI for Enhanced Lethality for Light, Medium and Hard Targets
  - Develop additional background info to support the artillery lethality roadmap – Release To be Announced

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Key Ammo Industrial Base Risks/Challenges & Opportunities

Risks/Challenges:

- Loss of Defense Unique 2nd/ 3rd tier and Single Point Failure suppliers
- Reduction of industry investment in new technology
- Increased unit prices
- Reduced ability to surge quickly
- Financial viability of ammo supply chain
- Overarching industrial base strategy agreement w/ implementation of Better Buying Power initiatives
- Risk Mitigation of Single Point Failures
- Modernizing AAPs without disrupting production and logistics operations

Opportunities:

- Consolidation of oversized capacity
- Leaning of manufacturing operations
- Large company Merger and Acquisition of 2nd and 3rd tier suppliers

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Key Ammo Ind Base Challenges

1. Financial viability of ammo supply chain
2. Overarching industrial base strategy agreement w/ implementation of Better Buying Power initiatives
3. Risk Mitigation of Single Point Failures
4. Modernizing AAPs without disrupting production and logistics operations

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